

# Index

- acoustic impulse response, 51, 67
- array gain
  - binaural
    - time domain, 57
  - multichannel
    - fullband, 73
    - subband, 72
- binaural noise reduction, 51
- circular, 53
- circularity, 53
- circularity quotient, 53
- conceptual framework, 4
- correlation coefficient, 16
- desired signal
  - conceptual framework, 3
  - multichannel
    - STFT domain, 68
    - time domain, 67
  - single channel
    - STFT Domain, 31
    - time domain, 15
- distortion, 6
- error signal
  - binaural
    - time domain, 58
  - conceptual framework, 9
  - multichannel
    - STFT domain, 75
  - single channel
    - STFT domain, 39
    - time domain, 20
- filtered desired signal
- binaural
  - time domain, 55
- multichannel
  - STFT domain, 70
- single channel
  - STFT domain, 34
  - time domain, 17
- finite-impulse-response (FIR) filter, 17, 33, 54, 70
- generalized Rayleigh quotient, 72
- global speech intelligibility index
  - binaural
    - time domain, 58
  - conceptual framework, 9
  - multichannel
    - fullband, 74
    - subband, 74
  - single channel
    - fullband, 38
    - subband, 38
    - time domain, 20
- identity filter
  - binaural
    - time domain, 57
  - multichannel
    - STFT domain, 71
  - single channel
    - STFT domain, 35
    - time domain, 19
- inclusion principle, 72
- input SNR, 6
  - binaural
    - time domain, 56
  - conceptual framework, 6
  - multichannel

- fullband, 71
  - subband, 71
- single channel
  - fullband, 35
  - subband, 35
  - time domain, 18
- intelligibility, 6
- interference
  - binaural
    - time domain, 55
  - single channel
    - STFT domain, 32
    - time domain, 16
- interframe correlation, 33
- interframe correlation coefficient, 32
- interframe correlation vector, 33
  
- linear convolution, 51, 67
- linear filtering
  - binaural
    - time domain, 53
  - multichannel
    - STFT domain, 70
  - single channel
    - STFT domain, 33
    - time domain, 17
  
- magnitude squared correlation coefficient (MSCC), 6
- maximum array gain
  - binaural
    - time domain, 57
  - multichannel
    - subband, 72
- maximum output SNR
  - binaural
    - time domain, 57
  - single channel
    - time domain, 19
- maximum SNR filter
  - multichannel
    - STFT domain, 72
  - single channel
    - STFT domain, 36
    - time domain, 19
- mean-squared-error (MSE), 9
- minimum MSE
  - conceptual framework, 11
- minimum variance distortionless response (MVDR), 12
- MSE criterion
  - binaural
    - time domain, 59
  - conceptual framework, 10
  
- multichannel
  - STFT domain, 76
- single channel
  - STFT domain, 39
  - time domain, 21
- MVDR filter
  - binaural
    - time domain, 62
  - multichannel
    - STFT domain, 80
  - single channel
    - STFT domain, 43
    - time domain, 24
  
- noise reduction, 1
  - conceptual framework, 3
  - multichannel
    - STFT domain, 67
  - single channel
    - STFT domain, 31
    - time domain, 15, 17
- noise reduction factor, 8
- noncausal Wiener gain, 44
- normalized correlation vector, 16, 55
- normalized MSE
  - binaural
    - time domain, 60
  - conceptual framework, 10, 11
  - multichannel
    - STFT domain, 76, 77
  - single channel
    - STFT domain, 40
    - time domain, 21, 22
  
- optimal filter
  - binaural
    - time domain, 61
  - multichannel
    - STFT domain, 77
  - single channel
    - STFT domain, 41
    - time domain, 22
- orthogonal decomposition
  - binaural
    - time domain, 55
  - conceptual framework, 4
  - single channel
    - STFT domain, 32
    - time domain, 16
- orthogonality principle, 11
- output SNR, 6
  - binaural
    - time domain, 56
  - conceptual framework, 7

- multichannel
  - fullband, 73
  - subband, 71
- single channel
  - fullband, 36
  - subband, 35
  - time domain, 18
- partial speech intelligibility index
  - binaural
    - time domain, 58
  - conceptual framework, 8
  - multichannel
    - fullband, 73
    - subband, 73
  - single channel
    - fullband, 37
    - subband, 37
    - time domain, 19
- partially normalized correlation coefficient, 69
- partially normalized correlation vector, 69
- performance measure
  - binaural
    - time domain, 56
  - conceptual framework, 6
  - multichannel
    - STFT domain, 71
  - single channel
    - STFT domain, 34
    - time domain, 18
- pseudo-variance, 53
- quality, 6
- residual interference
  - binaural
    - time domain, 55
  - single channel
    - STFT domain, 34
    - time domain, 17
- residual interference-plus-noise
  - binaural
    - time domain, 59
  - conceptual framework, 5, 10
  - single channel
    - STFT domain, 39
    - time domain, 21
- residual noise
  - binaural
    - time domain, 55
  - multichannel
    - STFT domain, 70, 76
  - single channel
    - STFT domain, 34
    - time domain, 17
- second-order circular, 53
- short-time Fourier transform (STFT), 31
- signal enhancement, 1
- signal model
  - binaural
    - time domain, 51
  - conceptual framework, 3
  - multichannel
    - STFT domain, 67
  - single channel
    - STFT Domain, 31
    - time domain, 15
- signal-to-noise ratio (SNR), 6
- SNR gain
  - conceptual framework, 7
- SNR improvement, 8
- spectral magnitude subtraction, 1
- speech distortion
  - binaural
    - time domain, 59
  - conceptual framework, 9
  - multichannel
    - STFT domain, 76
  - single channel
    - STFT domain, 39
    - time domain, 21
- speech distortion index, 8
- speech enhancement, 1
- speech quality index
  - binaural
    - time domain, 58
  - conceptual framework, 8
  - multichannel
    - fullband, 74
    - subband, 74
  - single channel
    - fullband, 37
    - subband, 37
    - time domain, 20
- steering vector, 68
- TIMIT database, 24
- widely linear filtering, 53
- Wiener estimate, 11
- Wiener filter
  - binaural
    - time domain, 62
  - multichannel
    - STFT domain, 80
  - single channel
    - STFT domain, 43
    - time domain, 24
- Woodbury's identity, 23, 41, 61, 78